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He

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(54) **APPARATUS AND METHOD FOR MEASURING SUBCUTANEOUS FAT THICKNESS USING ULTRASOUND**

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(52) **U.S. Cl.**

CPC ***A61B 8/0858*** (2013.01); ***A61B 8/5223*** (2013.01); *A61B 8/4483* (2013.01); *A61B 8/467* (2013.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

An apparatus and a method for measuring subcutaneous fat thickness using amplitude mode (A-mode) ultrasound technology are proposed. An echo peak generated at a fat-muscle boundary is distinguished from other echo peaks generated at muscle-bone boundaries or at muscle-muscle boundaries. The discrimination of echo peaks is based on echo time delay change when applying variable pressure to an ultrasound transducer. Statistical information of echo peak time delay change is estimated and is used for determine an echo peak generated at the fat-muscle boundary.

6 Claims, 5 Drawing Sheets